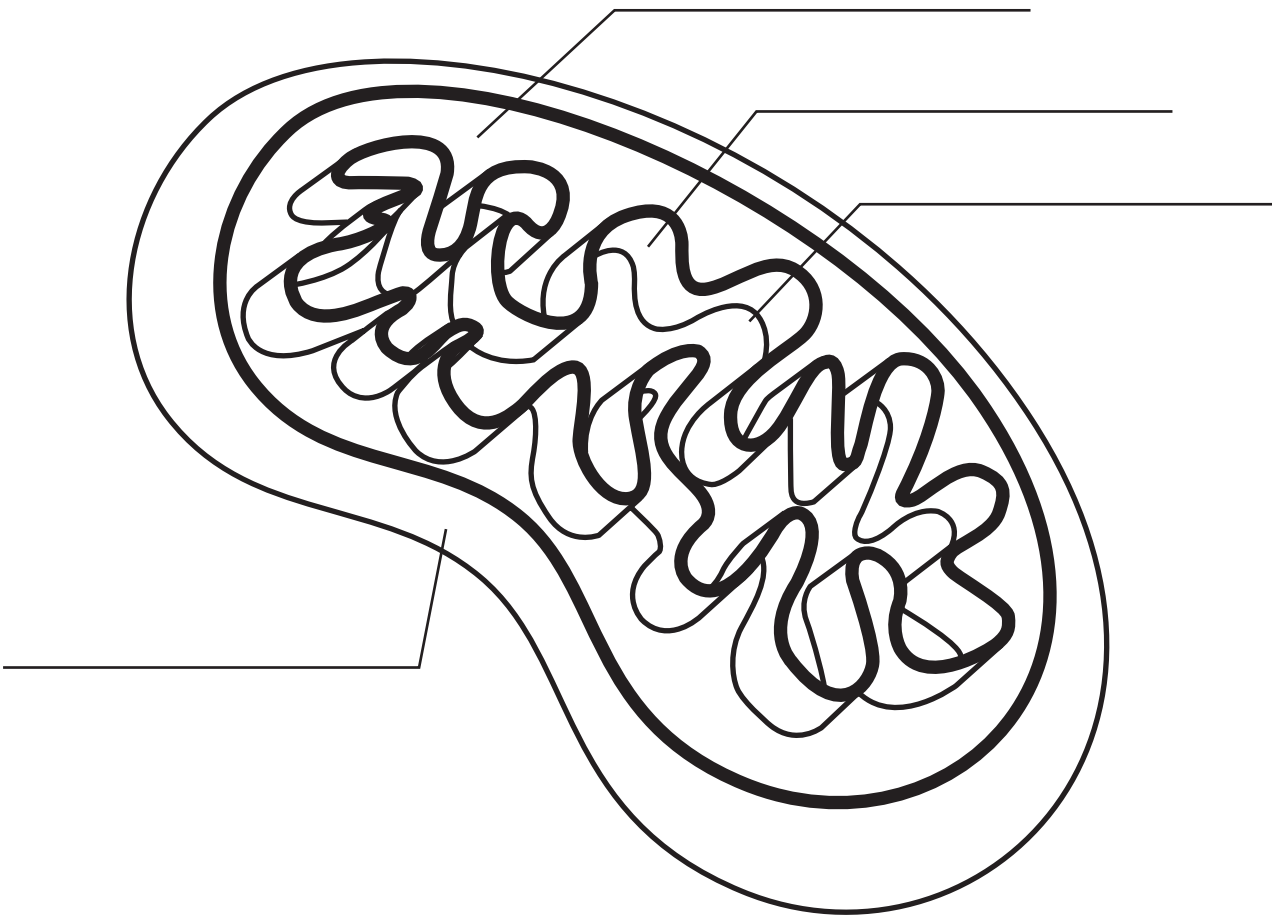


The Mitochondrion

In plant and animal cells, the final stages of cellular respiration take place in mitochondria. A mitochondrion has two membranes. The inner membrane is folded up inside the outer membrane. The space between the inner and outer membranes is called the intermembrane space. The space inside the inner membrane is called the matrix.

Label the inner membrane, intermembrane space, matrix, and outer membrane.



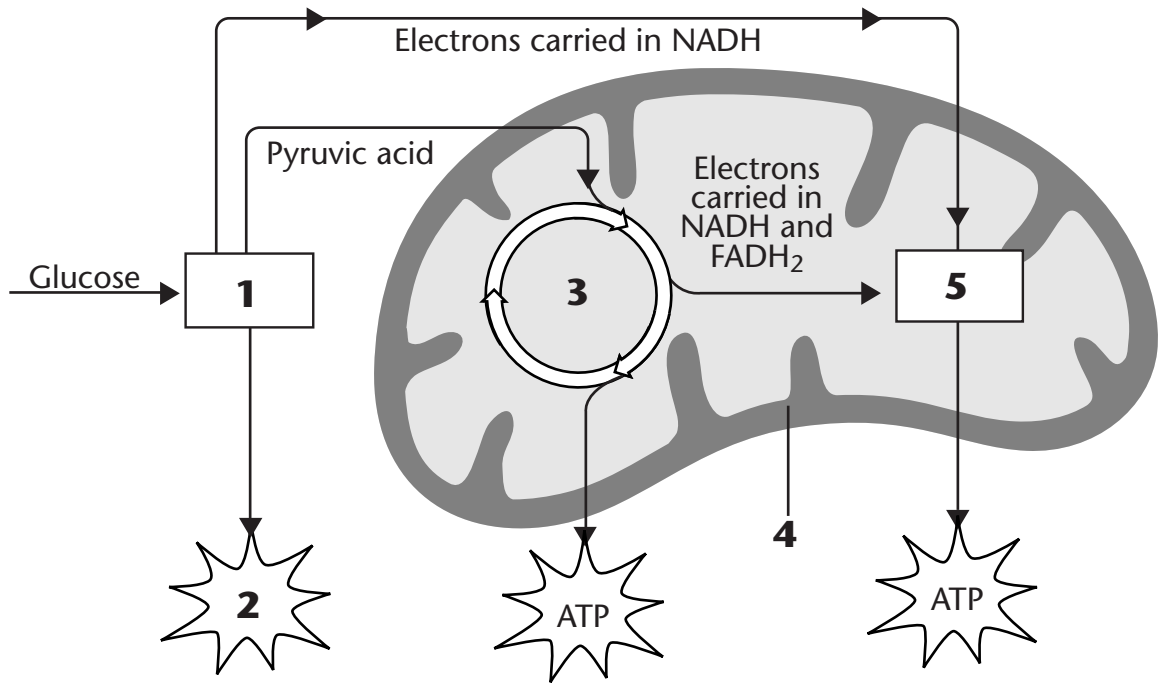
Answer the questions. Circle the correct answer.

1. In which membrane is the electron transport chain located?

outer membrane inner membrane

Cellular Respiration Overview

Cellular respiration is the process that releases energy from food in the presence of oxygen.



Use the words below to label the diagram of cellular respiration on the lines provided.

ATP	glycolysis	mitochondrion
electron transport chain	Krebs cycle	

1. _____
2. _____
3. _____
4. _____
5. _____

Use the diagram to answer the questions.

1. Where does glycolysis take place?

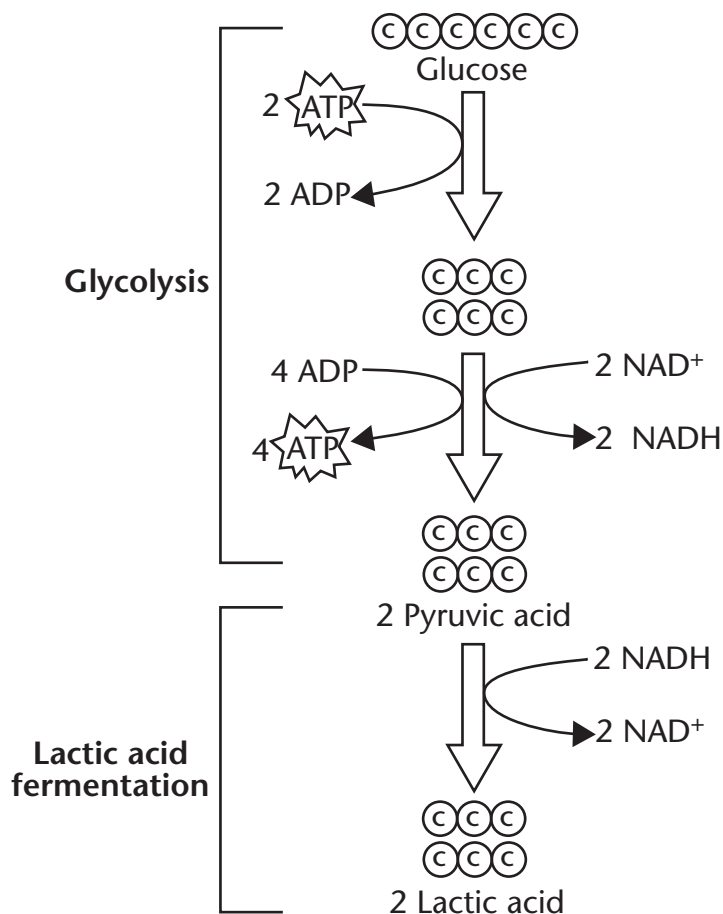
2. Where do the Krebs cycle and electron transport chain take place?

Glycolysis and Fermentation

Glycolysis uses ATP to break a molecule of glucose in half, producing pyruvic acid. When oxygen is not present, glycolysis is followed by fermentation. Fermentation enables cells to produce energy in the absence of oxygen.

Follow the prompts to identify important parts of glycolysis and fermentation.

- Color the carbon atoms blue.
- Circle the place where ATP is formed.
- Mark an X on the place where ATP is used.



Answer the questions.

1. How many carbon atoms are in one molecule of glucose?

2. What is the product of glycolysis? _____